

REMARKS

Claims 19, 24, 32, 35 and 37 have been canceled, and new claims 38-39 have been added. No new matter was added. Accordingly, claims 1, 3, 9, 10, 20, 21, 23, 25, 27, 29-31, 33, 34, 36, 38 and 39 are pending. Amendments to independent claims 1 and 9 and arguments are presented for overcoming the rejection of the claims based on the prior art of record. For reasons stated herein, Applicant respectfully submits that the present application is in condition for allowance.

I. Claim Rejections - 35 USC 102(b)

In the FINAL Office Action dated August 28, 2007, claims 19 and 37 are rejected under 35 USC 102(b) as being anticipated by EP 1199909 A9 of Sakai et al.

Claims 19 and 37 have been canceled. This rejection is now moot.

II. Claim Rejections - 35 USC 102(e)

In the FINAL Office Action dated August 28, 2007, claims 1, 3, 9, 10, 20, 21, 23, 24, 27, 29, 32-36 are rejected under 35 USC 102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0046500 A1 of Stegamat.

Independent device claim 1 of the present application has been amended to require an encapsulation layer comprising a dielectric oxide directly overlying the passivation layer **and** sealing layers of adhesive and glass. No new matter was added; for example, see previous versions of claims 23, 24, 29, 32 and 35. Accordingly, claim 1 requires the separate claim elements of an encapsulation layer comprising a dielectric oxide **and** sealing layers of adhesive and glass.

Independent method claim 9 of the present application has been amended to require the steps of depositing an encapsulation layer comprising a dielectric oxide directly on the passivation layer **and** sealing the device with adhesive and glass. No new matter was added; for example, see previous versions of claims 23, 24, 29, 32 and 35. Accordingly, claim 9 requires the separate process steps of depositing an encapsulation layer comprising a dielectric oxide **and** sealing the device with adhesive and glass.

A claim of a patent application is anticipated under 35 USC 102 **only if each and every element or process step** is found described in a single prior art reference. The identical invention must be shown **in as complete detail as contained in the claim**. The elements or process steps identified by the reference must be arranged as required by the claim. If a prior art reference relied on in a rejection made under 35 USC 102 does not contain every element or process step recited in the claim in as complete detail as is contained in the claim and arranged as recited in the claim, the rejection is improper.

With respect to the specific limitations added to claims 1 and 9, the FINAL Office Action states the following:

“Regarding claim 23, Stegamat further discloses wherein the encapsulating layer comprises glass (Figs. 1 and 2, 190 & 195; Page 2, Paragraph [0029]; Page 1, Paragraph [0007]). Note that the Examiner understands that glass is inherently SiO₂.

Regarding claim 24, Stegamat further discloses wherein the device further comprises sealing layers of adhesive and glass (Figs. 1 and 2, 190 & 195; Page 2, Paragraph [0029]; Page 1, Paragraph [0007]).

Regarding claim 29, Stegamat further discloses wherein the encapsulating layer comprises glass (Figs. 1 and 2, 190 & 195; Page 2, Paragraph [0029]; Page 1, Paragraph [0007]). Note that the Examiner understands that glass is inherently SiO₂.

Regarding claim 32, Stegamat further discloses wherein the device further comprises sealing layers of adhesive and glass (Figs. 1 and 2, 190 & 195; Page 2, Paragraph [0029]; Page 1, Paragraph [0007]).

Regarding claim 35, Stegamat further discloses wherein the sealing layers of adhesive and glass and the encapsulating layer comprises glass (Figs. 1 and 2, 190 & 195; Page 2, Paragraph [0029]; Page 1, Paragraph [0007]). Note that the Examiner understands that glass is inherently SiO₂."

Accordingly, the stated rejections require the single glass top cover (190) of Stegamat to be interpreted as being both the required "encapsulating layer" and the required "sealing layers", despite the fact that these are separate claim elements/steps as required by claims 1 and 9, as amended, of the present application. Applicant respectfully submits that this is an error and respectfully requests reconsideration.

Stegamat only discloses a single layer of glass (see the above passages of Stegamat cited by the Examiner). The glass top cover is mainly disclosed in connection with the prior art acknowledged by Stegamat and shown in Figure 1 of Stegamat (see reference numeral 190), but is also mentioned in Paragraph No. 0029 as part of Stegamat's device. In both cases the single layer of glass is preferably "mechanically attached" so it is akin to the sealing glass layer (8) of the present invention. However, this single glass top cover cannot be properly interrupted as being both the sealing layer of glass and the encapsulating layer.

In the FINAL Office Action, it is also stated that Stegamat "further discloses a polymeric encasement layer that can be directly in contact with the boron oxide barrier layer (Paragraph [0067])." However, Applicants respectfully submit that there is no disclosure in Stegamat of a dielectric oxide encapsulating layer as required by claims 1 and 9, as amended, of the present application.

The single glass top cover (190) of Stegamat cannot anticipate both the dielectric oxide encapsulating and sealing glass layers required by claims 1 and 9, as amended, of the present

application. Moreover, an encapsulating layer of dielectric oxide is not anticipated or made obvious by the polymeric encasement layers suggested in Paragraph No. 0067 of Stegamat. The presence of both dielectric oxide encapsulating and adhesive/glass sealing layers allows a greatly enhanced encapsulation of the device according to the present application. In addition, the boron oxide layer acts as a passivation layer, protecting the cathode when the dielectric oxide encapsulating layer is deposited by electron beam evaporation or sputtering, neither of which methods would be used for a polymeric layer. (See claims 30 and 31 of the present application which require these method steps.)

For these reasons, Applicant respectfully submits that Stegamat fails to contain every element or process step recited in claims 1 and 9, as amended, in as complete detail as is contained in claims 1 and 9, as amended, and arranged as recited in claims 1 and 9, as amended.

Further, new claims 38 and 39 have been added. Note that SiO₂ has been deleted from the list of dielectric oxides. Applicant submits that this provides an additional reason for patentability of these new claims over Stegamat.

Accordingly, Applicant respectfully submits that the 102(e) anticipation rejection based on Stegamat has been overcome and should be withdrawn.

III. Claim Rejections - 35 USC 103(a)

- A. *In the FINAL Office Action dated August 28, 2007, claim 25 is rejected under 35 USC 103(a) as being obvious over U.S. Patent Application Publication No. 2004/0046500 A1 of Stegamat in view of U.S. Patent No. 5,998,805 issued to Shi et al..*

Claim 25 depends indirectly from base claim 1.

Shi et al. is cited merely for disclosing the use of an epoxy resin as an adhesive.

Applicant respectfully submits that Stegamat in view of Shi et al. fails to disclose, suggest or teach the invention of claim 1, as amended, for the same reasons discussed above. Shi et al. fail to disclose, suggest, or teach any of the above referenced deficiencies of Stegamat. Accordingly, Applicant respectfully submits that claim 25 is patentable over Stegamat in view of Shi et al. for the same reasons claim 1 is patentable over Stegamat.

B. In the FINAL Office Action dated August 28, 2007, claims 30 and 31 are rejected under 35 USC 103(a) as being obvious over U.S. Patent Application Publication No. 2004/0046500 A1 of Stegamat in view of U.S. Patent No. 6,656,611 B2 issued to Tai et al..

Claims 30 and 31 depend directly from base claim 9.

Tai et al. is cited merely for disclosing electron beam evaporation and sputtering techniques.

Applicant respectfully submits that Stegamat in view of Tai et al. fails to disclose, suggest or teach the invention of claim 9, as amended, for the same reasons discussed above. Tai et al. fail to disclose, suggest, or teach any of the above referenced deficiencies of Stegamat. Accordingly, Applicant respectfully submits that claims 30 and 31 are patentable over Stegamat in view of Tai et al. for the same reasons claim 9 is patentable over Stegamat.

IV. Conclusion

In view of the above remarks, Applicant respectfully submits that the rejections have been overcome and that the present application is in condition for allowance. Thus, a favorable action on the merits is therefore requested.

Please charge any deficiency or credit any overpayment for entering this Amendment to our deposit account no. 08-3040.

Respectfully submitted,
Howson & Howson LLP
Attorneys for Applicants

By /William Bak/
William Bak
Reg. No. 37,277
501 Office Center Drive
Suite 210
Fort Washington, PA 19034
(215) 540-9216